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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,944	03/26/2004	Edward D. Glas	MS307029.01 / MSFTP637US	9894
27195	7590	03/23/2006	EXAMINER	
AMIN & TUROCY, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			HUYNH, PHUONG	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/810,944

Applicant(s)

GLAS ET AL.

Examiner

Phuong Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. This action is responsive to the Amendment filed on 10 February 2006. Claims 1, 4-6, 10, 15, 16, 18, 19 and 21 are currently amended with no new matter added.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al. (US Patent No. 5,812,780).

Regarding claims 1 and 16, Chen et al. discloses a system that test loads a server [Figs 3A and 3B] comprising:

a dynamic load adjustor component that dynamically adjusts user characteristics based at least in part on a browser type, for distribution thereof as a percentage of total requests sent to a server being load tested [see Chen et al.: col. 8, lines 1-67; and col. 9, lines 1-14; also see Figures 4 and 5 and col. 9, lines 15-40 and lines 57-67; col. 10, lines 1-18; col. 12, lines 47-67; col. 13, lines 1-3; col. 14, lines 58-65; and col. 16, lines 19-50].

Chen et al. does not explicitly disclose the claimed limitation "adjusts the user characteristics based at least in part on a browser type". However, Chen et al. discloses that "actual user behavior is modeled so that accurate determinations can be made as to the number of users a given server application can adequately support" and that "the program code running on a CPU and having access to client profile information constitutes means to manage and control the generation, scheduling and execution of tasks. The communications network physically connecting the LoadSim client to the Exchange Server, with associated network protocols and Exchange application protocols forms an output means to communicate tasks to the Exchange servers and an input means to receive responses to those tasks from the Exchange Server" [see Chen et al.: col. 15, lines 10-18]. Chen et al. further discloses that "the server program and each of multiple client programs are running on separate processors and communication is accomplished over a physical network, such as an Ethernet network or the Internet" [see Chen et al.: col. 1, lines 33-37].

Therefore, it is the Examiner's position that the above method and system as described above meets the claimed "adjusts the user characteristics based at least in part on a browser type" (emphasis added.)

Regarding claim 2, Chen et al. discloses a profile characteristic data store [common client profile 38 in col. 8, lines 51-65; and/or simulation file 84 in Fig. 7; col. 10, lines 66-67 and col. 11, lines 1-11; also see abstract, lines 25-27] that supplies the dynamic load adjustor component with weighting for a characteristic defined in a user profile.

Regarding claim 3, Chen et al. discloses the dynamic load adjustor component further comprises a weighting designator that randomly assigns to users characteristics based on weightings defined in the user profile [see Chen et al.: Abstract, lines 9-27].

Regarding claim 4, Chen et al. discloses the characteristic comprises at least one of: network connections, browser types, and load patterns [see Chen et al.: col. 11, lines 42-46; and col. 14, lines 56-65].

Regarding claim 5, Chen et al. discloses the characteristic statistically determined based on web log records [log file 108 in Fig. 7] [also see Chen et al.: Abstract, lines 20-27].

Regarding claim 6, Chen et al. discloses the characteristic predetermined in a single user profile [see Chen et al.: col. 3, lines 60-63; and col. 4, lines 1-9 and lines 21-31].

Regarding claim 7, Chen et al. discloses a load coordinator component that adjusts an intensity of a load test based on a current distribution of users entering and leaving the server relative to a desired test load [see Chen et al.: col. 14, lines 50-56].

Regarding claim 8, Chen et al. discloses artificial intelligence component [see Chen et al.: col. 3, lines 1-20].

Regarding claim 9, Chen et al. discloses closed loop control to enable a continual and sustained rate of requests to the server [see col. 12, lines 56-67; and col. 13, lines 1-21].

Regarding claim 17, Chen et al. discloses comparing a current load on the server with a desired load [see Chen et al.: Abstract, lines 27-29; col. 7, lines 22-40]. Although Chen et al. does not explicitly disclose a comparison between the current load and a desired load, it is the Examiner's position that "the weighted average response time can then be used as a threshold value to determine the total number of users a server application can adequately support" meets the claimed "comparing a current load on the server with a desired load."

Regarding claim 18, Chen et al. discloses creating a new user if the current load falls below a desired load [see Chen et al.: Abstract, lines 27-29; col. 7, lines 22-40; and col. 16, lines 39-49].

As mentioned is Chen et al., in Abstract, lines 27-29; col. 7, lines 22-40; and col. 16, lines 39-49, that the weighted average response time can then be used as a threshold value to determine the total number of users a server application can adequately support.

Chen et al. further discloses that "network administrator may make graphs of the weighted average response time of different client loads for an Exchange server to aid in determining when another Exchange server should be added to the network."

Although Chen et al. does not explicitly disclose that when the current load falls below a desired load, a new user is created, and only disclose a new Exchange server is added to the network as mentioned iteration above, it is the Examiner's position that the description above meets the claimed "creating new user when current load falls below a desired load."

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Regarding claim 19, Chen et al. discloses reducing the current load by one upon ending an iteration, if the current load rises above the desired load.

As mentioned is Chen et al., in Abstract, lines 27-29; col. 7, lines 22-40; and col.16, lines 39-49, that the weighted average response time can then be used as a threshold value to determine the total number of users a server application can adequately support.

Chen et al. further discloses that "network administrator may make graphs of the weighted average response time of different client loads for an Exchange server to aid in determining when another Exchange server should be added to the network."

Although Chen et al. does not explicitly disclose that reducing the current load by one upon ending an iteration, if the current load rises above the desired load, and only disclose a new Exchange server is added to the network as mentioned iteration above, it is the Examiner's position that the description above meets the claimed "reducing the current load by one upon ending an iteration, if the current load rises above the desired load."

Regarding claim 20, the combination as claimed wherein "controlling a rate of loading via a feedback loop control.

As mentioned in Chen et al., in col. 13, lines 3-21, that "another safety mechanism to prevent message explosion caused by positive feedback loop is implemented called automatic message generation damping. A LoadSim client will track how many times a given message has been forwarded or replied and diminish, by a damping factor... for each successive iteration with the damping factor having increasing

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impact until eventually extinguishing any possibility of reply or forward." Therefore, it is the Examiner's position that the automatic message generation damping meets the claimed "feedback loop control."

Claims 10-15, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Malmskog et al. (US Patent No. 6,721,686).

Regarding claim 10, Malmskog et al. discloses a system that stress a server, comprising: an execution engine [testing tool application 22] that generates a scenario that loads the server via a plurality of users, the plurality of users is dynamically adjusted based on predetermined weightings of a user profile having weighted characteristics that comprises at least a browser type therein, wherein the scenario distributes user characteristics as a percentage of total requests [see Malmskog et al.: col. 3, lines 56-67, col. 4, lines 1-17 and lines 48-67; col. 5, lines 1-18; col. 6, lines 1-48, and 58-67 ; and col. 7, lines 7-16; also see Figures 5-7].

As mentioned in Malmskog et al., col. 3, lines 56-67, col. 4, lines 1-17 and lines 48-67; col. 5, lines 1-18; col. 6, lines 1-48, and lines 58-67; and col. 7, lines 7-16,, that under real world load conditions a web server on a wide area network (WAN), such as Internet, will communicate with clients over a variety of connection types such as high-speed broadband and to simulate real world load conditions and responses to clients of different connection rates, testing tool application 22 may generate a groups of connections to server 12 that have a corresponding connection speeds slower than the actual speed of local area network 16. Malmskog further discloses that testing tool application permits user to configure as many groups of

connections as the user desires, and each group uses a scenario to generate HTTP requests to server [see Malmskog et al.: col. 6, lines 13-21]. Moreover, the scenario maybe configured using a scenario configuration interface, which provides users the editing ability and the user may also adjust a total request count via the configuration interface to set the total number of requests during the test. Malmskog et al. further discloses that a weighting format may be selected which may be percentage-based.

It is known that different types of browsers such as Internet Explorer or Mozilla provide a method for client side JavaScript to make HTTP request.

Although Malmskog et al. does not disclose explicitly a "weighted characteristics that comprises at least a browser type". It is the Examiner's position that the above described *testing tool application* meets the claimed "weighted characteristics that comprises at least a browser type" (emphasis added).

Regarding claim 11, Malmskog et al. discloses the scenario comprises at least of a test mix and a load profile [see Malmskog et al.: col. 6, lines 61-67].

Regarding claim 12, Malmskog et al. discloses a control input that adjusts rate of requests loaded onto the server [operating system 24 along with K-Queue and filter] (see col. 4, lines 31-47, and col. 3, lines 37-43).

Regarding claim 13, Malmskog et al. discloses a queuing mechanism [K-Queue] that retrieves and sorts requests to be sent to the server (see col. 3, lines 7-43).

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Regarding claim 14, Malmskog et al. discloses a scheduler [traffic shaper 24b and delay parameter 44] that determines number of requests to be generated for an upcoming period (see col. 5, lines 31-39).

Regarding claim 15, Malmskog et al. discloses the requests sorted according to time function for execution [TCP/IP routines] (see Figure 5).

Regarding claim 21, Malmskog et al. discloses the system for test loading a server comprising:

means for dynamically adjusting user characteristics while loading the server [network device 20] [see Malmskog et al.: col. 2, lines 55-65 and col. 3, lines 1-6]; and

means for distributing the user characteristics as a percentage of total requests sent to the server, each user characteristic including at least a browser type [scenario configuration interface] [see Malmskog et al.: Figure 7].

As mentioned in Malmskog et al., col. 3, lines 56-67, col. 4, lines 1-17 and lines 48-67; col. 5, lines 1-18; col. 6, lines 1-48, and lines 58-67; and col. 7, lines 7-16;, that under real world load conditions a web server on a wide area network (WAN), such as Internet, will communicate with clients over a variety of connection types such as high-speed broadband and to simulate real world load conditions and responses to clients of different connection rates, testing tool application 22 may generate a groups of connections to server 12 that have a corresponding connection speeds slower than the actual speed of local area network 16. Malmskog further discloses that testing tool application permits user to configure as many groups of connections as the user desires, and each group uses a scenario to generate HTTP requests to server [see Malmskog et al.: col. 6, lines 13-21]. Moreover, the scenario maybe configured using a scenario

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configuration interface, which provides users the editing ability and the user may also adjust a total request count via the configuration interface to set the total number of requests during the test. Malmskog et al. further discloses that a weighting format may be selected which may be percentage-based.

It is known that different types of browsers such as Internet Explorer or Mozilla provide a method for client side JavaScript to make HTTP request.

Therefore, it is the Examiner's position that the above description meets the claimed "each user characteristic [client characteristics] including at least a browser type" (emphasis added).

### ***Response to Arguments***

3. Applicant's arguments filed 06 February 2006 have been fully considered but they are not persuasive.

- Regarding claims 1 and 16; as amended, Applicants argue "the cited document however does not disclose a dynamic load adjustor that dynamically adjusts user characteristics based at least in part on a browser type" [see Remarks page 5, lines 28 - page 6, lines 1 and 2].

Chen et al. does not explicitly disclose the claimed limitation "adjusts the user characteristics based at least in part on a browser type." However, Chen et al. discloses that "actual user behavior is modeled so that accurate determinations can be made as to the number of users a given server application can adequately support [see Chen et al.: Abstract, lines 4-7]" and that "the program code running on a CPU and

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having access to client profile information constitutes means to manage and control the generation, scheduling and execution of tasks. The communications network physically connecting the LoadSim client to the Exchange Server, with associated network protocols and Exchange application protocols forms an output means to communicate tasks to the Exchange servers and an input means to receive responses to those tasks from the Exchange Server" [see Chen et al.: col. 15, lines 10-18]. Chen et al. further discloses that "the server program and each of multiple client programs are running on separate processors and communication is accomplished over a physical network, such as an Ethernet network or the Internet" [see Chen et al.: col. 1, lines 33-37].

Therefore, it is the Examiner's position that the above method and system as described above meets the claimed "adjusts the user characteristics based at least in part on a browser type" (emphasis added.)

- Regarding the Remarks, at page 6, lines 8-11, Applicants argue that "independent claims 10 and 21, as amended, respectively recite: a user profile having weighted characteristics that comprises at least a browser type, and each user characteristic including at least a browser type" and that "Malmskog et al. does not disclose these exemplary aspects of Applicants' claimed invention."

As mentioned in Malmskog et al., col. 3, lines 56-67, col. 4, lines 1-17 and lines 48-67; col. 5, lines 1-18; col. 6, lines 1-48, and lines 58-67; and col. 7, lines 7-16; that under real world load conditions a web server on a wide area network (WAN), such as Internet, will communicate with clients over a variety of connection types such as high-speed broadband and to simulate real world load conditions and responses

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to clients of different connection rates, testing tool application 22 may generate a groups of connections to server 12 that have a corresponding connection speeds slower than the actual speed of local area network 16. Malmskog further discloses that testing tool application permits user to configure as many groups of connections as the user desires, and each group uses a scenario to generate HTTP requests to server [see Malmskog et al.: col. 6, lines 13-21]. Moreover, the scenario maybe configured using a scenario configuration interface, which provides users the editing ability and the user may also adjust a total request count via the configuration interface to set the total number of requests during the test. Malmskog et al. further discloses that a weighting format may be selected which may be percentage-based.

It is known that different types of browsers such as Internet Explorer or Mozilla provide a method for client side JavaScript to make HTTP request.

Therefore, it is the Examiner's position that the above description meets the claimed "a user profile having weighted characteristics that comprises at least a browser type, and each user characteristic including at least a browser type" (emphasis added).

### **Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed,

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and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh whose telephone number is 571-272-2718. The examiner can normally be reached on M-F: 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuong Huynh  
Examiner  
Art Unit 2857

PH  
03/13/2006



CAROL S.W. TSAI  
PRIMARY EXAMINER